MANAGEMENT PLAN

November, 1996

for Skwaha Lake Ecological Reserve

BRITISH COLUMBIA

Ministry of Environment, Lands and Parks
BC Parks Department

105-03586/

Skwaha Lake
Ecological Reserve

MANAGEMENT PLAN

Prepared by
BC Parks Kamloops Area Pilot Project Team
for Thompson River District
Kamloops, B.C.

BC Parks

BRITISH COLUMBIA

Ministry of Environment, Lands and Parks

BC Parks
Kamloops, BC

APPROVALS

Kamloops Area Management Planning Pilot Project
Binder Approvals Page

Forward

This binder contains 16 management plans developed under the Kamloops Area Management Planning Pilot Project. This project began in 1994 to develop, implement and evaluate a systems approach to management planning. The project concluded in October, 1996. The management plans contained in this binder provide long-term direction for a group of 10 Class A parks, five ecological reserves and one recreation area. The intention is to review this binder and the plans contained here at regular intervals. Plan vision statements and objectives will not change extensively over time. Management actions, however, will change as priorities, funding and support resources come available.

- ☐ Coldwater River Park
- ☐ Goldpan Park
- ☐ Juniper Beach Park
- ☐ Lac Le Jeune Park
- ☐ Marble Canyon Park
- ☐ McConnell Lake Park
- ☐ McQueen Creek Eco. Res.
- ☐ Monck Park
- ☐ Paul Lake Park
- ☐ Skihist Eco. Res.
- ☐ Skihist Park
- ☑ Skwaha Lake Eco. Res.
- ☐ Soap Lake Eco. Res.
- ☐ Steelhead Park
- ☐ Tranquille Eco. Res.
- ☐ Walloper Lake

Approved by:

District Manager
Thompson River District
BC Parks Department

Assistant Deputy Minister
Park Management Committee
BC Parks Department

Skwaha Lake Ecological Reserve Management Plan

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I. Introduction

Ecological Reserve Purposes

As outlined in the Ecological Reserve Act of 1971, ecological reserves are protected for the following purposes:

- Scientific research and educational use
- Representation of natural ecosystems
- Study of recovery processes after modification by man
- Protection of rare and endangered native plants and animals in their natural habitat
- Protection of other unique and rare botanical, zoological or geological phenomena.

Management of ecological reserves is therefore concerned primarily with strict protection of the resources themselves and with the provision of those research and educational opportunities which will not harm or diminish these resources.

Recreation and tourism are not supported in ecological reserves, although public access for non-consumptive, observational activities is tolerated, provided no significant resource impact results from it.

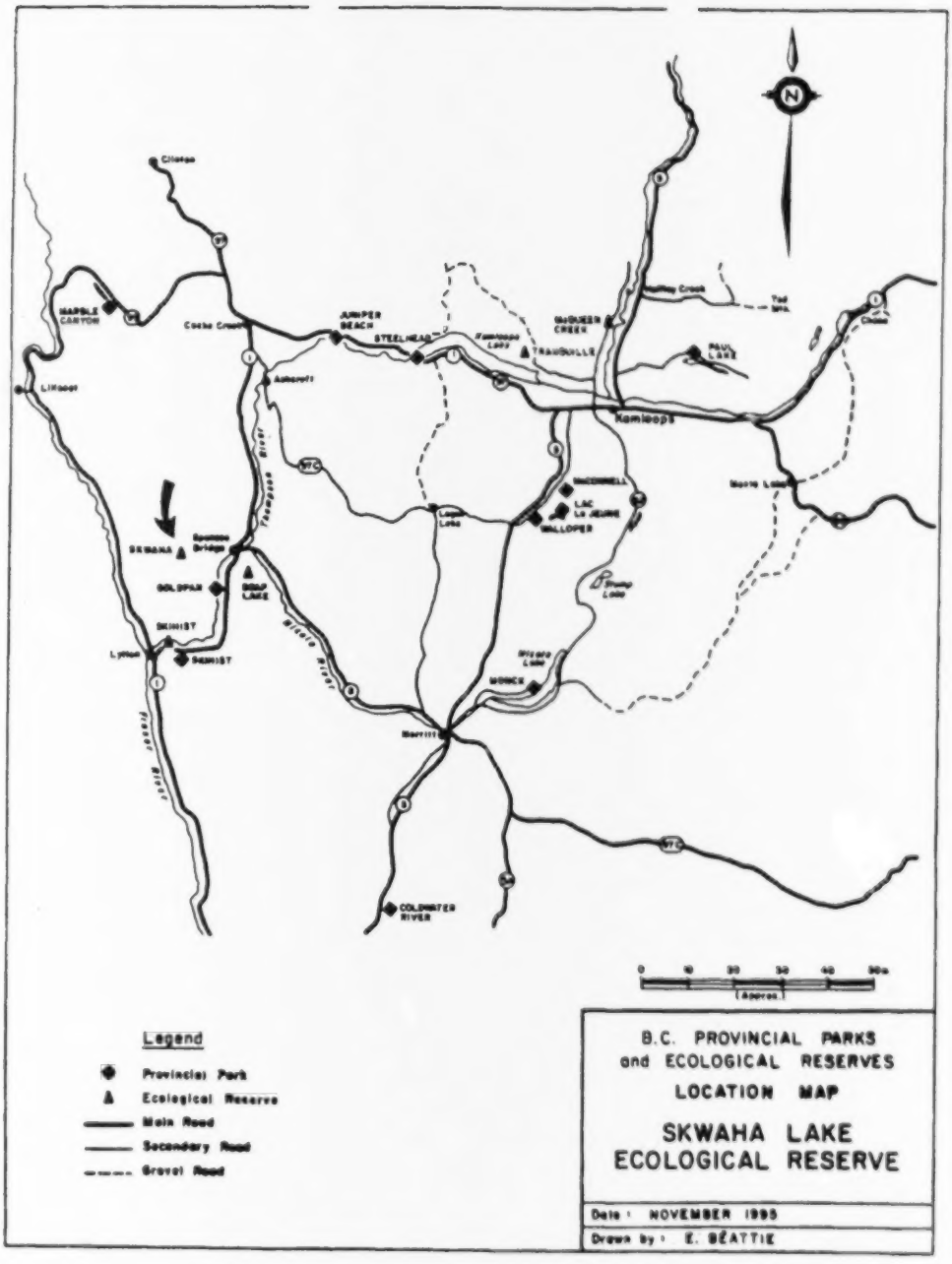
Purpose of the Management Plan

This plan states the role of the ecological reserve in the provincial system, the long-term vision for the ecological reserve and the management objectives and actions to achieve this vision. The ecological reserve role and objectives as stated in this plan cannot be contravened in meaning or intent without consultation with the public and approval by the district manager and BC Parks Management Committee (PMC). The five year business plan is subject to annual review and adjustments.

II. Background Summary

Natural Features

- Located 20 km N of Lytton and 11 km W of Spences Bridge, the reserve is reached via the Botanie and upper Skoonka Creek valleys.
- Part of the Clear Range within the Pavilion Ranges Ecosection and representing three biogeoclimatic variants within three zones, Interior Douglas-fir, Montane Spruce, and Engelmann Spruce-Subalpine Fir.
- With the southern (lower) boundary defined by a contour line and the remainder by straight lines, this reserve extends between 1200 and 1700 m elevation and comprises an area of 850 ha.
- Predominantly south-facing slopes in the lower half give way to a gently rolling plateau above and the soil cover varies from shallow or absent to deep.
- Small streams, all tributaries to Skoonka Creek, drain the reserve, the main one originating in tiny, boggy-margined Skwaha Lake.


Legend
Provincial Park
Ecological Reserve
Main Road
Secondary Road
Gravel Road
B.C. PROVINCIAL PARKS
and ECOLOGICAL RESERVES
LOCATION MAP
SKWAHA LAKE
ECOLOGICAL RESERVE
Date : NOVEMBER 1995
Drawn by : E. BEATTIE
Kamloops
Clinton
Lillooet
Ashcroft
Chase
Salmon River
Thompson River
Adams River
Shuswap River
Mara Lake
Lac La Jeune
Galloper
Skwaha
Goldpan
Skimist
Lytton
Squaam Bridge
Deep Lake
Juniper Beach
Steelhead
Tranquille
Paul Lake
Monte Lake
Squilax
Monte
Chilliwack River
Coldwater River
97C
1
5
97
(Approx.)

2

- The reserve has an attractive mix of open and forested habitats, with open areas ranging from dry, south-facing grasslands at lower elevations to lush subalpine meadows at higher elevations, and forested areas ranging from Douglas-fir and aspen to subalpine fir, Engelmann spruce, and lodgepole pine stands.
- Spectacular mass displays of native wildflowers, among the best in the province, occur at different elevational zones and in successive waves through the spring and summer. At the same time an area of exceptional species diversity.
- One red-, two blue- and numerous yellow-listed plants are known from the reserve and further additions to the rare and endangered list are likely after more surveys.
- Larger wildlife includes black bear, bighorn sheep, mule deer, and coyote.

Traditional Uses

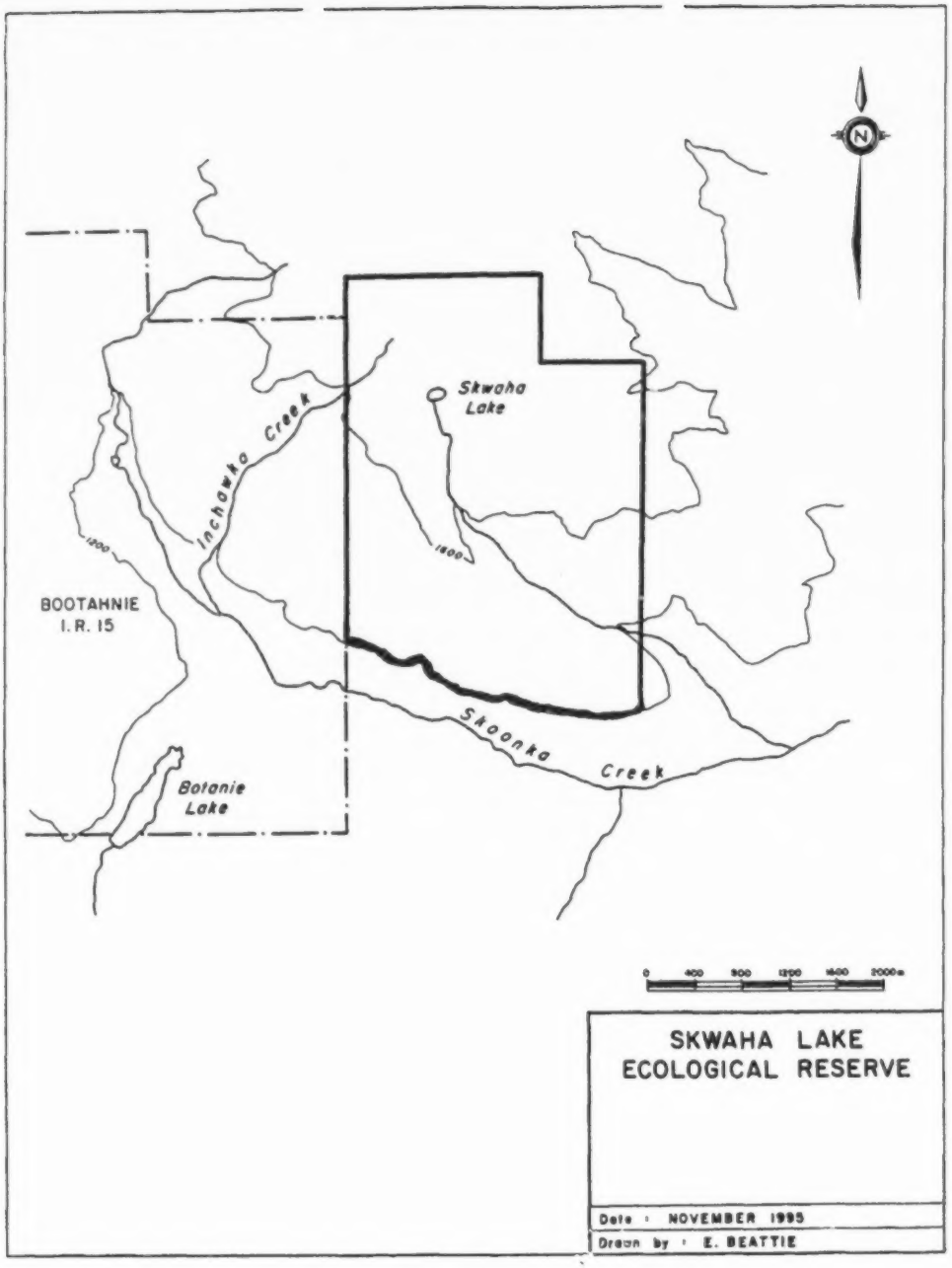
- First Nations people of the Lytton Band have traditionally used plant and game resources from surrounding areas, including the present ecological reserve.

Administrative History of Reserve

- The reserve was applied for in 1974 and established in 1978 by order-in-council # 293.
- The following clause, later shown to be *"ultra vires"*, was incorporated into the order in council:
  "the grazing of cattle will be permitted within the reserve subject to maintenance of good range condition as determined by the British Columbia Forest Service Range Division, and a representative of the Ecological Reserves Committee who will have control over stocking rates and the date on which cattle are first allowed on the reserve in spring"
- On the basis of this clause, pre-existing grazing was continued and 5-year grazing permits were re-issued, most recently in 1988 and in 1993.

Management Issues

- A gradual deterioration of the native grassland and meadow ecosystems through cattle grazing is evident in the reserve and is expressed in a general advance of non-native plants throughout the reserve, as well as in more localized, heavier damage of vegetation and soils.
- Adventive species such as Kentucky bluegrass and dandelion are increasingly and irreversibly replacing the colourful mix of native grasses and wildflowers.
- In addition to this, trampling damage is severe in wetland plant communities, riparian areas, around water sources, in late-snow areas, in favourite bedding areas, and around salt blocks. Some soil denudation and beginning erosion is seen near the southern boundaries.
- Principal disagreement exists between the Lillooet Forest District and BC Parks on the evaluation of this situation, with the Forest District considering the range to be in good condition and BC Parks being extremely concerned about the loss of undisturbed natural ecosystems in the reserve.


Skwaha Lake
Inchewka Creek
1200
1400
BOOTAHNIE I.R. 15
Skoonka Creek
Botanie Lake
0 400 800 1200 1600 2000m
SKWAHA LAKE
ECOLOGICAL RESERVE
Date : NOVEMBER 1995
Drawn by : E. BEATTIE

4

- Concerns exist that deterioration of a fence on the western boundary may allow unauthorized access to the reserve for additional livestock from Indian Reserve #15.
- Wildfire played a role in shaping present vegetation patterns. There may the risk of a catastrophic fire if fuels are allowed to build up.
- New road access by logging operations to the northeast may create the potential for trespass hunting in the reserve.
- There are concerns that organized group visits to the reserve may occur without permit.

Research and Educational Use

- Due to outstanding biodiversity and attendant aesthetic features this reserve has had many contributions, at various levels of expertise, towards the inventory of its flora and vegetation.
- Thirteen permanent plots were established in key grassland and meadow communities as benchmarks for the documentation of species and cover changes in connection with grazing. Distribution of vegetation types in the reserve was mapped and described at the same time.
- Educational use of the reserve by naturalist groups has occurred on an informal basis.

III. Role and Long-Term Vision

Biodiversity protection, both on the species and the community level, is the most important role of this ecological reserve. The area offers the opportunity to preserve a series of highly productive grassland and meadow communities in an essentially original, native state. A major research role of the reserve is in the field of ethnobotany and in unravelling the causes for the area's outstanding biodiversity and productivity. In the medium term the portions with grazing impact offer themselves for studies of recovery processes. Future educational roles could also be developed on the themes of biodiversity and ethnobotany.
At present, the reserve provides much of the representation in three biogeoclimatic units within the Pavilion Ranges Ecosection. Most ecosystem types in this reserve are not duplicated in any other protected area.

On the basis of its outstanding natural features this reserve has a "flagship" role among those in the southern interior.

The long-term vision for this reserve is of an area where livestock grazing has ceased and a full complement of wildlife interacts naturally with an extremely rich and varied vegetation cover. The reserve is the undisturbed portion of a larger protected area (Arthur's Seat) that has been created through the P.A.S. process. Human interference is at a minimum and restricted to research and to those native traditional uses defined in cooperation with the Lytton Native Band.

IV. Management Objectives and Actions

Grazing

Objective: The objective is to eliminate domestic grazing at the earliest opportunity. In the interim, grazing will be made to comply with the provisions of the Forest Practices Code.

Fencing

Objective: Prevent trespass grazing along western boundary and ensure new cutblocks to the northeast will not allow new livestock access.

Fire

Objective: Maintain a near-natural pattern of fire-induced successional stages in grassland and forests.

Traditional Uses

Objectives: Permit traditional uses by local First Nations people without compromising conservation values in the reserve.

Introduced Plant Species

Objective: Establishment of noxious weed species will be prevented in the reserve.

Forest Pests and Diseases

Objective: Where possible, native pests and diseases will be considered part of the ecosystem and allowed to take their course. Major outbreaks, especially of non-native organisms, in the reserve will be evaluated and appropriate strategies will be developed jointly with the Forest Service if adjacent commercial forests are at risk.

Access

Objective: Road access should be kept as far away as possible from the reserve's boundaries.

Reserve Boundaries

Objective: Enhancement of the reserve's viability of by providing wider and more natural boundaries.

Research and Education

Objective: Provide opportunities and support for non-consumptive/non-destructive research in the reserve. Continue benchmark study.

APPENDIX A 5 YEAR BUSINESS PLAN

Skwaha Ecological Reserve

Goal:	Identify reserve boundaries and inform public about the role of the reserve within the Provincial Park system.
Action:	Install new signage.
Goal:	Eliminate cattle grazing in reserve.
Action:	In cooperation with the Forest Service, eliminate grazing in the reserve upon retirement of present permit holder.
Goal:	Identify study plots.
Action:	Survey vegetation monitoring plots and permanently identify location.
Goal:	Extend ecological reserve boundaries.
Action:	Add additions through LRMP process.
Goal:	Protect / enhance ecological reserve values through fire management.
Action:	Develop a fire management strategy.
Goal:	Identify usage of reserve by First Nation peoples.
Action:	In cooperation with Lytton and Cook's Ferry Bands, identify areas of cultural significance.